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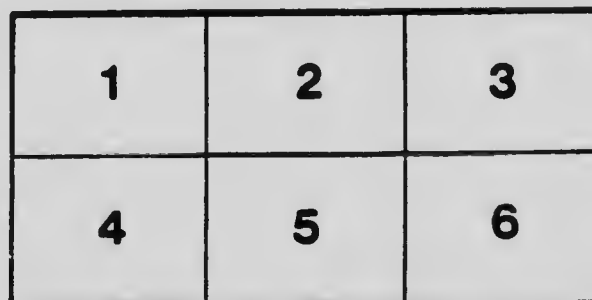
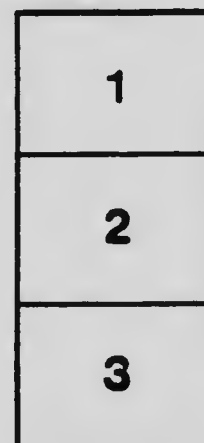
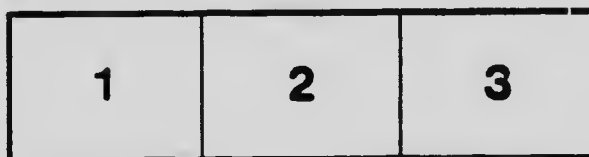
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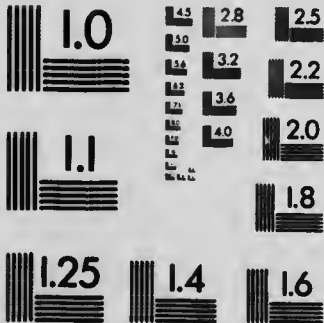
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**Kitsumkallum
Timber Company
Limited**

**Report
and General Information**

By Sir Henry M. Pellatt





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COAST DISTRICT.
Merchantable Length, 160 feet.

INTRODUCTION BY SIR HENRY PELLATT.

The Timber Limits which have been acquired by the Kitsumkallum Timber Company must be very valuable. In the subsequent pages of this little book I have given all the detailed information in my possession concerning the chief features as a timber proposition, and as a lumber proposition, and the more the facts are studied, the clearer becomes the conclusion that the Limits are desirable ones, and will yield in due time a handsome profit upon the money invested in them.

WHERE THE LIMITS ARE.

The Limits are situated on the Skeena River in British Columbia about 92 miles east of the Pacific Ocean. The Skeena River is a fast flowing, deep river, running east and west across the north part of the Province of British Columbia westerly, emptying into the ocean at Prince Rupert, the western terminal on the Pacific Ocean of the Grand Trunk Pacific Railway.

The main line of this railway is already built from Prince Rupert in an easterly direction along or near the banks of the Skeena River, right through the Kitsumkallum Timber Limits, and continues on towards Fort George for 50 or 60 miles farther. When the steel heads of the railway are joined in a few months' time (see the letter of Mr. Schreiber on later page) these Limits will be on the main line of the Transcontinental Railway and on the direct route from Winnipeg to Prince Rupert on the sea coast.

There is already, at the little settlement of Kitsum, a railway station and a railway siding.

In order to reach the Timber Limits from Toronto at the present time, it is necessary to go by C.P.R. across the continent to Vancouver, then take steamer at Vancouver and proceed up the coast to Prince Rupert, about 36 hours, and then take the train of the Grand Trunk Pacific to Kitsum. If close connections are made at Vancouver from the railway to the steamboat, and at Prince Rupert from the steamboat to the railway, the whole journey from Toronto takes seven full days, and longer as connections are delayed.

In attempting to describe the location of these Limits to enquiring parties they lost interest in them before one could furnish a sufficient description of the locality; they seemed to be miles away from everywhere and almost inaccessible.

When the Grand Trunk Pacific is finished the village of Kitsum in the heart of the Timber Limits is within a four days' run from Toronto by direct railway route.

At or near the little settlement of Kitsum two rivers run into the Skeena from the north, the Zymaquoit (*Zymagorite*, Indian) and the Kitsumkallum, which are quite close to one another. The Limits run for 36 miles along the banks of these two rivers and the Skeena River in such a way that they are never more than from one mile to three miles distant from the river waters. All along are creeks emptying into one or other of the rivers mentioned, traversing the timber forests in varying directions.

NATURAL FEATURES AND SCENERY.

The scenery is beyond verbal description; it embraces all the features of natural beauty for which British Columbia and the Rocky Mountains are celebrated; the magnificent forests with the giant trees, the snow-clad mountains in the distance, the great flowing rivers and the gradual slope of the wooded country from the river levels to the foothills of the mountains beyond.

At the head waters of the Kitsumkallum River our men endeavoured to describe to me what they called the most beautiful place that had ever been seen. On the plan will be seen Lake Kitsumkallum about 5 miles long and 3 miles wide; the lake narrows at the south end into the river and opens again into Mud Lake, from which the river flows south towards the Skeena; looking from the Kitsumkallum Lake towards Mud Lake there are seen the largest, tallest and leafiest trees in all the forests round about; the lake and the opening river and the little lake below with these luxurious forest trees on all sides sloping upwards to the mountains, form a scene of marvellous beauty.

Although settlement is turning towards the beautiful valleys in the neighbourhood, very few people have as yet contemplated the beauty of this forest section. The exploiter and the pioneer are met with all the dangers and difficulties of the original explorers. The Indians are still in possession of the country, though by no means of a picturesque type; the tribe is the Siwash, and are described to me as being ugly and filthy, both male and female. There are plenty of wild beasts in the forest; our own men in the district have shot grizzly bears and also black bears—the true specimens of each kind that we read about and which are gradually being exterminated by the advance of civilization. There are wolves in abundance, also coyotes, and in the forest trees birds of all descriptions.

The rivers are teeming with fish; the great canneries are on the Skeena River about 50 miles lower down; the fish are in such profusion that when they die they line the banks of the river in the Limits—in fact, the banks of these rivers for hundreds of miles are piled with them though they do not remain long, because as the waters rise they are carried away to the sea.

There is a vastness and grandeur in connection with the district which is interesting, and which should be thought about and understood in order to

get a proper idea of the size and quality of the timber which has been acquired by the Company. (I quote the words of Messrs. Coxford and Ludgate taken from their report on a later page):—

"We were told to expect to find a change in the character of the woods in British Columbia as compared with Ontario and Quebec, but we did not think the change would be so vast. We had not stretched our imagination sufficiently. We had not conceived of trees growing to such a height with so little taper and so free from branches or limbs. The height astonished us, and for the first week or so we continually paced fallen trees to accustom ourselves to the length.

"It is a very high average to find trees in our Ontario woods to cut out four log lengths, but there we find seven lengths to be conservative.

"We find our old eastern bush associates doubt our description of those limits, and they, like ourselves, will have to see to believe."

The cruise of Mr. J. H. Tucker, page 14 was the first report from the property made in the year 1910. The subsequent report of Messrs. Coxford and Ludgate has just been received, and Mr. Ludgate has been living upon the property for two years and Mr. Coxford has made various visits during that time; their report was prepared by themselves, and appears in their own language, page 33—it will be found interesting reading.

The letter from Mr. Duncan Ross, ex-M.P., is published in order to show his opinion of market conditions for timber in British Columbia.

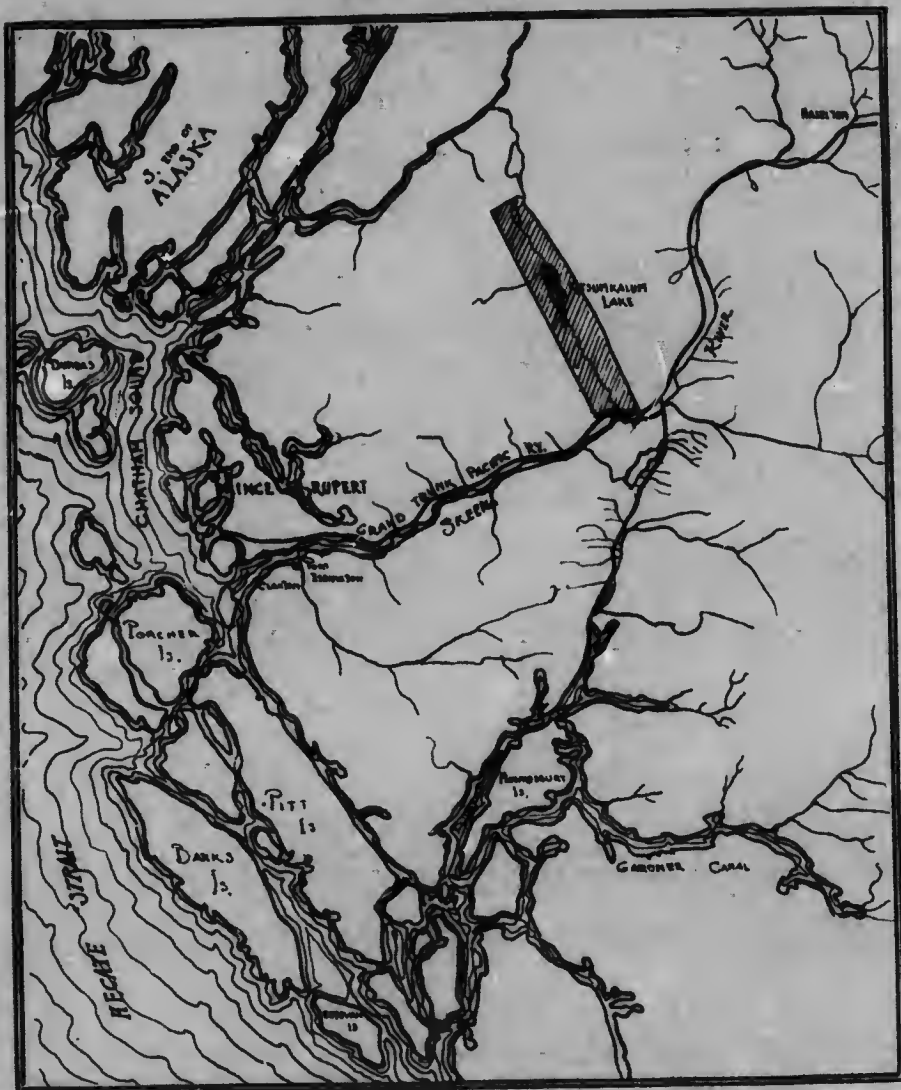
The letter from Mr. Schreiber shows that we may expect the Grand Trunk Pacific Railway to be opened as a Transcontinental Road on or about August, 1914.

The Summary of the number of acres in the limits, together with the estimate of Standing Timber and its various kinds, will be found on page 25.

The opinion of Colonel Mackie, as a representative Canadian Lumberman, upon Market Conditions for timber, will be found commencing on page 29.

HENRY M. PELLATT.

KEY MAP



MAP OF SKEENA RIVER DISTRICT SHOWING LOCATION OF LIMITS.

DESCRIPTION OF PROPERTY, THE COMPANY'S CHARTER AND INTENDED OPERATIONS.

The following is taken from the Original Prospectus of the Company, and is correct in all the main details, though there are some variations in acreage and quantity of standing timber arising from subsequent negotiations:—

The Company is incorporated under the laws of the Dominion of Canada, and has its Head Office in the City of Toronto in the Province of Ontario, with a Western Office on the Company's property, and also a Branch Office in London, England, which has not yet been opened.

The Company has purchased a magnificent forest of timber in Northern British Columbia, containing 71 perpetual licenses of 43,000 acres, more or less, and it contains cedar, spruce, hemlock, larch and cottonwood.

The object of the Company is to manufacture lumber, and to sell it in Canada and in the United States or elsewhere, and particularly in the treeless prairie provinces of the Canadian North-West, also to manufacture pulp if considered advisable and to sell it in the United States; pulp is now admitted free from Canada into the United States.

LOCATION.

The limits are situated in the well-known Skeena River District in Northern British Columbia on the Kitsumkallum and Zymaquoit Rivers, which empty into the Skeena River, the former 85 miles and the latter 90 miles east of Prince Rupert.

The main line of the Grand Trunk Pacific Railway, the new National Railway of Canada, traverses the property and crosses the two rivers mentioned where they enter the Skeena. (See the map.)

The mill sites are located in an excellent position between the mouths of the Kitsumkallum and the Zymaquoit Rivers where they empty into the Skeena, or on either side of them, and it is proposed to immediately erect saw mills and other mills for the manufacture of timber and pulp in the most economical and expeditious manner.

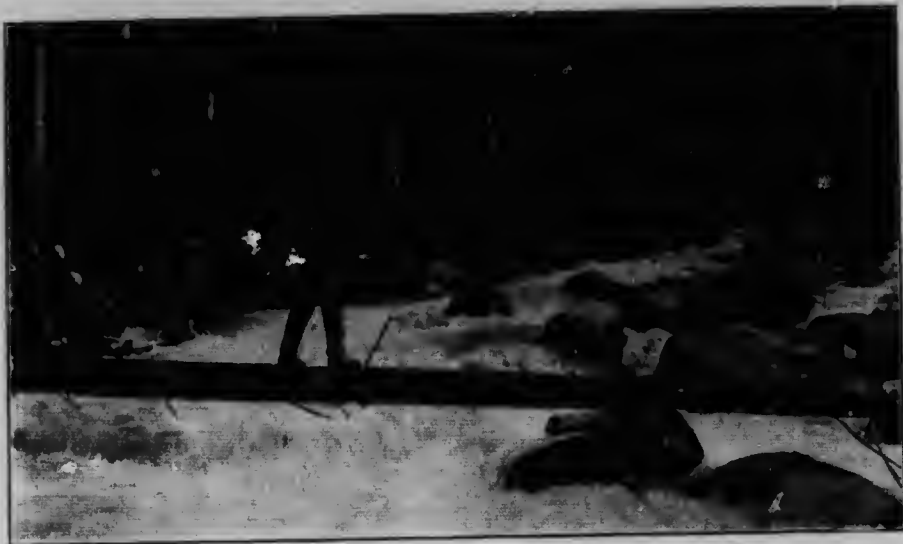
It is admitted by leading experts, lumber men, railway men and others, that this timber forest is one of the most advantageously situated timber tracts in British Columbia.

MARKET.

The market conditions are excellent for the following reasons:—Prince Rupert is the terminal of the Grand Trunk Pacific Railway on the Pacific Ocean, where the Skeena River empties itself into the ocean. It will undoubtedly be a great Seaport, and will be the harbour for the Mercantile and Passenger Marine in connection with the great National Railway of Canada, and the country around Prince Rupert is practically void of merchantable timber; this Company will be a chief source of supply for Prince Rupert and the whole surrounding country.

The chief market is to be found in the trade of the prairie sections of the country extending from Kitsumkallum as far east as Winnipeg, where the rapid settlement and colonization upon agricultural lands and otherwise create constant assured and profitable demand for lumber of every description, sufficient of itself to exhaust the entire output of the forest.

The settlement which is taking place is marvellous, and settlers are enduring hardships for the want of mills, the requirements for lumber in this respect along the line of the Grand Trunk Pacific Railway alone would take care of the output of a dozen mills of the kind proposed to be erected, and the tributary territory of as much more. The Company invites enquiries from the Western Officials of the Railway Companies in confirmation of this statement.



CROSSING THE RAPIDS.

The Immigration statistics of the Dominion Government just published show that 350,000 people settled in this country during the year 1911.

The Kitsumkallum Valley and the Valleys of the Lakelse and Copper Rivers, with other areas along the Skeena River, provide approximately 300,000 acres of ideal fruit lands about to be placed under cultivation, where apples and strawberries are grown in great profusion. There will be extensive colonization in these valleys, calling for large supplies of lumber and materials.

There are also large quantities of spruce timber of the highest quality, for which there is and always will be a demand in the British Islands and on the Continent, which will be increased by the opening of the Panama Canal, which will greatly enhance the value of these holdings.

TRANSPORTATION FACILITIES AND COMPETITION.

The Grand Trunk Pacific Railway main line has now been built from the terminal city, Prince Rupert, eastwards into the province of British Columbia.

The line of the railway as situated runs directly through the property of the Company, and is in actual operation right through that section upon which the Company proposes to construct their mills, thus affording excellent transportation facilities for all classes of manufactured timber to the various markets above indicated.

The Company being in direct railway communication with Prince Rupert will be able to deliver lumber at less cost than the same timber can be manufactured in Prince Rupert, which is a great advantage to the Company, inasmuch as other operating Companies will have to tow their logs from the Naas River, Alice Arm Kitimat, or from south of Prince Rupert 100 or more miles. This towing of logs is expensive, and involves elements of danger from the seas breaking and scattering the logs. It should be stated here that the Company's position from the standpoint of transportation is superior to any competition which there may ever be from Grahams and Moresby Islands, as these Islands are situated well out in the Pacific Ocean, which will necessitate transportation of manufactured lumber by specially built barges or scows, and the upkeep of tugs, to which also must be added the double handling of lumber and the dockage dues.

By loading its cut of lumber and timber directly on to the cars of its own railway siding the Company will save fully \$1.00 per 1,000 feet in the case of the mills where logs have to be towed, and \$2.00 in the case of the Island mills.

There will be other competition by timber Companies possessing advantages of a similar character to those above outlined in the case of this Company, but it is obvious that there is ample demand for all of the manufactured lumber which these Companies will be able to supply, and a very great deal more.

CRUISE.

Examinations and estimates of the timber have been made by the following persons:—Mr. J. H. Tucker, who was a chief expert for many years for Lacey & Company, the well-known Lumber Appraisers of Chicago (copy attached); Wm. Kenedy, an Ottawa Valley cruiser of experience and high reputation; J. W. Macfarlane, a pioneer timber owner and cruiser of Vancouver; John McShane of Vancouver, a cruiser of high standing, and by Mr. Vandell and Mr. Gordon Booth, cruisers of equally high standing.

These gentlemen speak and write in terms of great appreciation as to the location, logging conditions and the excellence of the standing timber. Their reports show 1,000,000,000 feet of timber. This includes only the first and merchantable timber. With logging as cheap as it is on this tract, immense quantities of second grade can be logged and milled which will show considerable profit.

LOGGING OPERATIONS.

None of the timber is situated more than from one to three miles from the rivers or drivable creeks. The ground is smooth and with a gradual slope to the banks of the rivers, making it an ideal logging proposition.

The Company has caused careful inspection to be made of the logging conditions, and has obtained tender from a large jobber to log the whole tract for \$5.00 a 1,000 feet. Notwithstanding this tender the Company claims that a considerable portion of this tract of timber can be placed in the water for from \$2.50 to \$3.50 a thousand feet, and the balance at \$4.00 per thousand feet or less.

The logs are floated down the river at practically no expense to the mill pond. The rivers contain ample water for driving from early spring to late fall, a feature rarely found in British Columbia or in Ontario or Quebec. Very few improvements at a small expense would make these rivers the most ideal in the Province.

Estimated cost of operation by a Company:—

Logging.....	\$5.00
Milling.....	4.00
Crown dues.....	.50
Insurance, etc.....	.50
Sinking Fund.....	1.00

Total per thousand feet, B.M., delivered on cars, \$11.00

The plans for the Company's first mill are ready, and in order to meet proper conditions of operation the output will be comparatively light for the first year, the intention being to cut 10 million feet during that period, and at the end of the first year to increase the output to 35 million feet per annum, which is the full capacity of the mill.

The policy of the Company as at present determined is to increase the output to the full capacity of the first mill, and afterwards by other mills to the extent that may be necessary by the extensions of the Grand Trunk Pacific Railway, and opening up of the country until the final completion of the road.

In the beginning the wants of the railway and the incoming settlers will consume the output of the first mill; on the completion of the railway the second mill will undoubtedly be necessary.

SALE PRICE OF LUMBER.

To-day the ruling price of lumber in Prince Rupert is from \$20.00 to \$40.00 per M., according to class and grade, and the price of lumber to those further inland in the newly settled districts will necessarily be higher; at present the supply comes from Vancouver and is subject to an almost prohibitive rate. Lumber mills at Vancouver netted \$18.00 per M. for their lumber on cars last season.

RESOURCES OF THE COMPANY.

On the basis of manufactured timber, the resources of the Company could be estimated as follows:—

1,000,000,000 feet Timber yielding a net profit of, say, \$6.00 per
1,000 feet.....\$6,000,000

This is the system generally followed in Prospectuses issued by Timber Companies. This Company presents the matter in another way, so as to include the price of standing timber on conservative estimates:—

1,000,000,000 feet of standing Timber at \$1.50 per 1,000 feet..\$1,500,000

The actual value to be realized from the limits lies somewhere between these two estimates of value.

REPORT ON THE KITSUMKALLUM VALLEY AND TIMBER.

By J. H. TUCKER, Sept. 29th, 1910.

Coast Dist., Range 5.

British Columbia.

LOCATION.—This tract is located on the Kitsumkallum River, which is a tributary to the Skeena River and empties into it from the north side about 80 miles from its mouth, or 91 miles by the Grand Trunk Pacific Railway, east of Prince Rupert. It extends back of the Skeena on either side of the Kitsumkallum River and Lake for about 45 miles. The District is familiarly known as the Kitsumkallum Valley.

ACREAGE.—The tract contains 71 limits, or about 43,000 acres in round numbers.

ACCESSIBILITY.—The tract can be easily reached from Vancouver by steamer. The Grand Trunk Pacific boats, which are the best on the route, leave Vancouver every Saturday and Wednesday. It takes 36 hours to make the run to Prince Rupert. From Prince Rupert river boats leave almost every day for Hazelton, which is the head of navigation on the Skeena River. In a month from now it will be possible to reach the tract by rail. The steel is within 20 miles of the mouth of the Kallum, and as soon as the bridges are completed across some of the larger streams, trains will be operated to the little town of Kallum.

KINDS OF TIMBER.—Timber on the tract consists of Cottonwood, Red Cedar, Spruce, Hemlock, Larch and Jack Pine.

STAND OF TIMBER.—The growth or stand of timber in this valley is heavy, but changes to the different varieties according to the soil and elevation. Along the lower river, and on the flats, there is usually a strip of cottonwood which in places runs back on to the lower benches. After you get away from the flats, and rise up on to the first bench, the stand is chiefly spruce. As you go further back and rise on to higher ground, the stand changes to hemlock and cedar. As you climb still higher the larch comes in and is chiefly larch and hemlock from there to the tops of the ridges.

On the "Upper River," or from the foot of the Canyon to the foot of Mud Lake, there is not much cottonwood. Along the river bottom the stand is chiefly spruce, with some cedar on the low ground. As you get away from the river on the "West Side" the cedar disappears and after you pass the 500 ft. elevation the spruce generally ceases. And from here to the 1200 ft. line the stand is about equally divided between hemlock and larch. After you get higher than 1200 feet the timber becomes shorter on account of the thinness of the soil and the stand is chiefly hemlock.

On the east side of the river the conditions are different. This country has been burned over at some time and the timber is principally second growth, the creek bottom being fine young spruce and the benches a mixture of spruce, hemlock and cedar, all long, clean, straight and very sound.

East and North of Deep Creek conditions change again, but the timber is an old growth. Hemlock is very fine quality, so also is the larch and compares favorably in size with any on the Coast. There is also a scattering of spruce and cedar through these valleys. On the high hills to the extreme east of the limit the timber gets small again.

Immediately east of the Canyon, and west of Deep Creek, there is a plain covered with jack pine about large enough for ties and pulp timber.

The country to the west of Mud Lake and the lower end of Big Kallum Lake has a remarkably fine stand of timber. Immediately adjoining the lakes there are some bottoms of small spruce, then comes a ridge with Jack Pine and small hemlock, but this is narrow and you soon rise on to good ground, heavily timbered with large hemlock and larch, with some bunches of No. 1 Cedar and Spruce scattered through it. There are bunches of cedar on these limits that will easily run 80,000 feet per acre. The trees are large, smooth and well shaded. The larch and hemlock is a very uniform stand all over these limits and will easily run 40,000 feet board measure per acre.

Clear Creek, which empties into the Kallum Lake from the northeast, has also some very fine limits. The stand is uniform and timber of fine appearance.

From Clear Creek across to Cedar River there are some very fine bottoms of farming land, with some fine cottonwood along the river bank. Along the Kallum River, north and west of the Lake, the conditions are very much the same, but after you get away from the river bottoms you run into a heavy stand of good cedar and spruce. The cedar on these benches is of very fine quality and will run from 50,000 to 100,000 feet board measure per acre. These conditions hold good for about six miles up Cedar River. From here on the country is well timbered, but I did not visit it for lack of time.

The appearance of the country and timber from the Lake and River is very prepossessing.

COTTONWOOD.—The Skeena River is noted for its cottonwood bottom and these extend up the Kitsumkallum. The timber is uniformly good; it is long, large and clean with very few limbs and no apparent defects.

CEDAR.—This is the red variety common to the Coast. The old growth is a good size and very free from all visible defects. It, of course, has the ground rot usual to this class of timber, but in many places it is as sound as a dollar on the stump. The trees are of fine appearance and will cut a large percentage of clear lumber. The second growth has a very fine appearance also. It is invariably sound on the stump, and in a healthy, thrifty condition. It will not yield much clear lumber but is excellent material for most building purposes, especially sills, ties and posts.

SPRUCE.—This is very valuable timber. It has two varieties, old and second growth. The old trees of immense size have some few defects, but will yield a large percentage of clear lumber. The second growth is invariably sound and in a thrifty, healthy condition, and makes very tough, serviceable lumber.

There are many of these trees so large they can never be logged with horses without blasting.

HEMLOCK.—I was surprised to find such a heavy stand of this timber throughout this district, generally running from 50 to 100 trees per acre. It has some defects and for that reason I have cut my estimate very heavily, making it certain that the country will yield more per acre than I have given it. The old growth is usually large and has a very fine appearance. The second growth is sound, clean and very long and has a very beautiful appearance in the forest. The size and quality of this timber depends greatly on the condition of the soil where it grows. On the gravelly benches it is inclined to be short and limby, but where there is any depth of soil it is long, clean and thrifty.

LARCH.—This is, perhaps, the finest appearing timber on the tract, with its long, clean body and no perceptible taper, and only an umbrella top; it certainly makes a beautiful appearance in the forest. It is also a very serviceable wood, and perhaps the most valuable of the tract. It makes



A WILD FOREST.

excellent sash and doors, all sorts of siding and inside finish. It is as good box lumber as pine and the finest pulp material in the forest. It always yields a big percentage of clear lumber.

JACK PINE AND POLES.—On the gravelly plains throughout the tract, where there is not sufficient depth of soil to produce the better timber, there is a dense growth of jack pine, small spruce and cedar. The jack pine and spruce will make excellent hewn ties and the cedar is excellent for fence posts, telephone and telegraph poles.

SUMMARY.—After going over my figures carefully, I find the tract will yield about as follows:

Cottonwood.....	30,000,000 ft. B.M.
Cedar.....	130,000,000 ft. B.M.
Spruce.....	140,000,000 ft. B.M.
Hemlock.....	350,000,000 ft. B.M.
Larch.....	260,000,000 ft. B.M.

Total..... 910,000,000

Add to this the Ties, Poles and Posts and it would easily bring the amount the tract will produce over a billion feet.

TOPOGRAPHY AND SURFACE CONDITIONS.—I am surprised at the low fall of the Skeena River and the slight elevation of the entire Kallum Valley above tide water. The altitude at the mouth of the Kitsumkallum River is 200 feet; at the mouth of Cedar River, 40 miles up, is only 700 feet, or a rise of 500 feet in about 40 miles. The most of this occurs in the Canyon, the country both above and below the Canyon being comparatively flat, with very little fall to the river. The highest point I reached on the tract was 2200 feet, the general average being from 500 to 1200 ft. The valley is broad and flat, running from one half to three miles in width. The rises are smooth and gradual and the benches broad with gentle slopes. Some points of the limits run back on to high rocky ground, but these, of course, are not taken into consideration in the estimate. We did not find any bad or inaccessible ground on the tract. The surface is smooth and very free from rocks and windfalls and there is surprisingly little undergrowth for a Coast district; much of the forest has the appearance of a park. The surface conditions are the very best for logging.

CLIMATE.—This valley is about the dividing line between the arid and rain belts of British Columbia and consequently the seasons vary. Some years there is a heavy rain and snow fall, others again precipitation is moderate. There is usually from five to six months of winter and sufficient snow fall and cold weather to log on sleds. The rivers seldom freeze over. The lakes generally have sufficient ice to carry horses.

LOGGING CONDITIONS.—This timber can be logged very easily, either by sleds and driving the river or with skidders and logging railroads. From my some thirty odd years' experience in the lumber business, I would be in favor of the latter method, especially as it is not very practical to saw in the winter time.

My idea would be to place a mill on the railroad at the mouth of the Zymaquoit River, build a dam here and create a large holding pond for logs, push my logging railroad up the Zymaquoit River and across on to the Kallum River at the head of the Canyon. From here one spur would extend up the river and the lake on a very easy grade, and another swing across the river and pick up

all the timber on the north end of Deep Creek. Another spur would extend up the Kallum River, pick up the timber on the Kallum River bottom, extend across the river and pick up timber on Lower Deep Creek. I am confident I could log in this manner and deliver all the timber at the mouth of the Zymaquoit for \$4.00 per M., including first cost of railroad and equipment.

THE KITSUMKALLUM RIVER.—The distance from the Skeena to the foot of the Canyon is about 8 miles. The Canyon itself is 9 miles long. From the Canyon to Mud Lake is 7 miles. Mud Lake and its extensions are 3 miles. Big Kallum Lake 9 miles long and from the head of the Lake to the mouth of Cedar River is 3 miles. In all about 45 miles of river and lake. Cedar River, Nelson, Starr and Bennett Creeks can all be driven.

The Kallum River below the Canyon has a current of about 7 miles per hour and has a number of bad bars and sloughs along it. The Canyon itself has a fall of 200 feet in 9 miles. It is a narrow gorge in places and un-navigable.

Above the Canyon the river is smoother, has an average current of about five miles per hour and is an easy strip of water to drive.

Mud Lake is shallow but has sufficient water anywhere to hold logs. The narrows between Mud and Kallum Lakes has a current of about three miles per hour.

Big Kallum Lake is a beautiful strip of water. It is deep and navigable for good size boats.

The River above the Lake is very crooked, has a current of about six miles per hour. By cleaning out one small flood wood jam it can be driven.

ZYMAQUOIT RIVER.—As I have stated before, this, in my estimation, is the proper place for the mill. There is a good dam site near the railroad. The river can be driven for six or eight miles, making an excellent pond and booming ground. There is a large flat east of the river that can be used for dry sheds and piling ground, and there is a lot of timber that can be logged very cheaply into this stream, making it a desirable point to commence operations.

FIRES.—There is very little risk of fire in this country, and if the tract is properly patrolled during the dry season, even this would be removed.

WATER.—As you will see by the accompanying plan, the country is well watered. Nearly all of the limits have live streams running across them.

WATER POWER.—At the Canyon on the Kallum River, there can be sufficient power developed to operate a saw mill and logging railroad by electricity.

SURVEY.—The survey of these limits has been done with great care and we had no trouble in finding all lines and corners.

ESTIMATES.—This report is based on a careful run over the entire country, and will be found conservative. A careful estimate or re-count is not essential in this country, owing to the uniformity of the stand, and would be needless expense.

GENERAL REMARKS.—The location of this tract makes it very valuable. It is about the only body of timber on the Skeena River available for manufacturing. The big valleys to the east of this will have to draw their supplies from this country and it is also the most available for the railroad company.

There is a vast quantity of timber adjacent to these limits but not included within their lines. I am confident the Kallum River and its tributaries will yield 2,000,000,000 feet of merchantable timber.

(Signed) J. H. TUCKER.

Vancouver.

LETTER FROM MR. DUNCAN ROSS, EX-M.P.,
TO COLONEL MACKIE.

VANCOUVER, B.C.,

July 5th, 1910.

Lt.-Col. H. J. Mackie,
City.

My Dear Col. Mackie,

In reference to your Timber Limits on the Kitsumkallum River, I have no hesitation in saying that the manufacture of lumber in that locality should prove a very profitable enterprise. I have been operating on the Skeena River for over a year in connection with the construction of the Grand Trunk Pacific, and know intimately the resources and requirements of the district. The immediate local demand for lumber is comparatively large and increasing, and I have paid as high as \$23 per M. for rough lumber on the Skeena. Track laying on the G.T.P. has commenced and will reach Kitsumkallum in a few months. This will bring the Prince Rupert market for lumber within easy reach. The Kitsumkallum Valley is rapidly filling up with settlers, and these will require considerable lumber.

I have therefore no hesitation in saying that a mill established there should do a large and prosperous business.

Yours very truly,

(Sgd.) DUNCAN ROSS

(Late M.P.)

LETTER FROM MR. E. J. CHAMBERLAIN, NOW PRESIDENT
GRAND TRUNK PACIFIC.

GRAND TRUNK PACIFIC RAILWAY, WINNIPEG, CANADA
E. J. CHAMBERLAIN, Vice-President and General Manager.

September 24th, 1910.

My Dear Sir:

Referring to conversation had with you this morning, relative to your timber limits at Kitselas, B.C.

Would say that we could not at this time consistently enter into a contract with you for ties, as before you would be ready to deliver our line will probably be 200 miles east of that point, and it might be more convenient for us to buy ties ahead of construction along the line.

You need not, however, have any hesitancy about developing this property, as you will have almost an unlimited market between that point and Winnipeg for your lumber and other material. The settlement which is taking place is something marvellous, and settlers are now suffering great hardship for the want of just such an institution as you propose to erect on our line. The requirements for lumber along the Grand Trunk Pacific line alone would take care of the output of a dozen mills such as you propose to erect, and the tributary territory as much more.

I trust, therefore, you will hasten your development, so that you may be ready for business as soon as our line is open through. We will probably have track as far as Kitsela within the next 30 days, so that you would have no difficulty in getting in machinery, if you desire to make a start this season.

Yours very truly,

(Sgd.) E. J. CHAMBERLAIN.

Lieut.-Col. Herbert Mackie,
Pembroke, Ontario.

P.S.—If you will get your mill in operation, we would be glad to give you preference on construction material for the line east.—E.J.C.

PARTICULARS OF LICENSES.

LIST OF LICENSES AND ACREAGES OF THE LIMITS OF KITSUMKALLUM

Timber License Number, Old and Perpetual.	Original Acreage.	Proposed Acreage.
2254 33177		
8683 P	525.5	525.5
2255 33178		
8684 P	619.2	619.2
2253 33179		
8685 P	640	640
2065 33180		
8686 P	640	579
2064 33181		
8687 P	585	568
2063 33182		
8688 P	640	555
2062 33183		
8689 P	1	656
697 33184		
8690 P	620	620
2066 33186		
8691 P	362.8	362.8
33187		
8692 P	638.5	652
33188		
8693 P	440	332
16394 44467 492		
8694 P	612	612
16395 44468		
8695 P		202
16396 44469 482		
8696 P	114.5	136
16397 44470 484		
8697 P	640	640
*16398 44471 2261		
8698 P	263.6	322
16399 44472		
8709 P	640	640
16400 44473		
8710 P	640	640
16401 44474		
8711 P	640	640
16402 44475		
8712 P	640	640
16405 44476 2725		
8699 P	640	640
16406 44477		
8700 P	640	640
16407 44478		
8701 P	640	640

PARTICULARS OF LICENSES—Continued.

Timber License Number, Old and Perpetual.			Original Acreage.	Proposed Acreage.
16408	44479			
	8702 P		640	640
16409	44480	2724		
	8703 P		640	563
16410	44481			
	8704 P		640	640
16411	44482			
	8705 P		640	640
16412	44483			
	8706 P		640	640
16414	44485	2726		
	8707 P		383.2	367
16415	44486	2722		
	8708 P		475.5	239
16416	44487	475		
	8713 P		640	640
16417	44488	476		
	8714 P		640	640
16418	44489	477		
	8715 P		640	640
16419	44490	2264		
	8716 P		640	580
16420	44491			
	8717 P		640	640
16421	44492			
	8718 P		640	640
479	44773			
	6227 P		525.3	525.3
473	44774			
	6228 P		640	640
474	44775			
	6229 P		640	640
472	44776			
	6230 P		534	534
*478	44777			
	6231 P		640	640
2263	44778			
	6232 P		514.3	582
480	44779			
	6233 P		640	615
481	44780			
	6234 P		640	572
*2262	44781			
	6235 P		368	575
482	44782			
	6236 P		167	201
483	44783			
	6237 P		637.5	578
485	44784			
	6238 P		614	635

PARTICULARS OF LICENSES—Continued.

Timber License Number, Old and Perpetual.	Original Acreage.	Proposed Acreage.
44785		
6239 P	...	312
486 44786		
6240 P	640	635
487 44787		
6241 P	640	640
488 44788		
6242 P	640	640
489 44789		
6243 P	640	640
*490 44790		
6244 P	640	588
493 44791		
6245 P	640	640
494 44792		
6246 P	640	640
495 44793		
6247 P	640	640
496 44794		
6248 P	595.1	595.1
497 44795		
6249 P	640	640
2252 44796		
6250 P	636	636
499 44797		
6251 P	622	622
498 44798		
6252 P	640	640
500 44799		
6253 P	624	578
2251 44800		
6254 P	640	640
2250 44801		
6255 P	640	640
2249 44802		
6256 P	640	640
2256 44803		
6257 P	640	640
2257 44804		
6258 P	640	640
44805		
6259 P	636	...
44806		
6260 P	640	..
44807		
6261 P	640	358
Total Acreage.....	40904	39391.9

PARTICULARS OF LICENSES—Continued.

*Further Adjustments.			Original		Proposed	Increase
			Acreage.		Acreage.	over First
						Adjustment.
16398	44471	2261				
	8698 P					
478		44777	903.6	1282	320	
	6231 P					
2262	44781					
	6235 P		368	640	65	
490	44790					
	6244 P		640	642	54	
Total			1911.6	2564	439	
Total Acreage above			40904	39391.9		
Add Increase over First Adjustment				439		
			40904	39830.9		

ACREAGE AND STANDING TIMBER.

The total Acreage of the Limits is 39,830.9 acres, and Messrs. Coxford and Ludgate estimate that there are approximately 1,000,000,000 feet board measure, composed of the following kinds:—25 per cent is spruce, 50 per cent. is hemlock, 20 per cent. is cedar, 5 per cent. Larch and Cottonwood.

LICENSE FEES AND DUE DATES.

License Numbers.				
Due.	Perpetual.			
July 20th	8683	8687	8691	11 Licenses at \$115.00 \$1265.00
	8684	8688	8692	
	8685	8689	8693	
	8686	8690		
August 1st	8694	8699	8707	{ 15 Licenses at \$115.00 } 10 Licenses at \$140.00 } \$3125.00
	8695	8700	8708	
	8697	8701	8713	
	8698	8702	8714	
	8696	8703	8715	
	8709	8704	8716	
	8710	8705	8717	
	8711	8706	8718	
	8712			
April 13th	6227	6238	6249	{ 30 Licenses at \$115.00 } 3 Licenses at \$140.00 } \$3870.00
	6228	6239	6250	
	6229	6240	6251	
	6230	6241	6252	
	6231	6242	6253	
	6232	6243	6254	
	6233	6244	6255	
	6234	6245	6256	
	6235	6246	6257	
	6236	6247	6258	
	6237	6248	6261	
			Total,	\$8,260.00

N.B.—THESE PAYMENTS ARE DUE IN VICTORIA ON ABOVE DATES,

STATEMENT OF GOVERNMENT CHARGES.

License Fees payable as follows:—

April 13th.	30 Licenses at \$115	\$3,450.00	
	3 Licenses at \$140	420.00	
			<u>\$3,870.00</u>
July 20th.	11 Licenses at \$115		1,265.00
August 1st.	15 Licenses at \$115	\$1,725.00	
	10 Licenses at \$140	1,400.00	
			<u>3,125.00</u>
	Total License Fees (as given above)	\$8,260.00	
Fire Protection Dues:—			
	1½c. per acre on 40,000 Acres		600.00
			<u>600.00</u>
	Total	\$8,860.00	

COMPARISON BETWEEN GOVERNMENT DUES PAYABLE IN ONTARIO AND IN BRITISH COLUMBIA.

ONTARIO.

There is paid to the Government for the right to cut the timber:—

Stumpage.....	\$11.50 per 1,000 feet
Dues.....	2.00 per 1,000 feet
	\$13.50 per 1,000 feet

BRITISH COLUMBIA.

Stumpage—There is no specific charge ; it is included
in the License Fees.

Dues.....	\$0.50 per 1,000 feet
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MARKET CONDITIONS AND REASONS.

By Col. Mackie to Sir H. M. Pellatt.

January, 1914.

The Sawn Lumber Market of Canada from coast to coast suffered as other markets did during the past year.

The upbuilding of the Prairies was practically at a standstill; uncompleted houses in towns and cities are a frequent sight; the tightness of the money market was severely felt in the West.

The tabulated output of the coast mills for 1913 is not yet to hand, but it will be found to compare favourably with that of 1912, but the same price per M. was not obtained.

Bush operations were carried on extensively, and with the logs at the mills it was better to convert them into lumber and realize some profits than to carry them over.

The mills that catered to the export trade suffered likewise and probably to a greater extent.

The demand in the East fell off somewhat but not to the extent that it did in the West. The eastern market called for western timber, but the excessive freight rates always stood in the way. With the opening of the Panama Canal this condition will probably never return. Transportation will then be so reduced that the eastern operators will not have the protection of the now existing freight rate of \$22.40 per M.

The annual report of a leading bank is in error in stating that the eastern lumbermen obtained \$3.00 per M. over 1912 prices. It was fully \$3.00 lower.

Indications for a successful season in the East are already to hand. Most of the prominent operators have already disposed of their 1914 cut and at a fair advance on 1913.

The prairies consume fully 70 per cent. of the British Columbia cut and indications are favourable from that point. Fully 2,000,000 acres increase has been added to the cultivated acreage this past summer and fall. This increase alone will consume a large quantity of material.

The Provincial Secretary of Alberta told me, a few weeks ago, that the farmers of Alberta this past summer and fall used their surplus cash in liquidating past contracted debts and were not increasing their land holdings nor constructing new buildings as a result.

He says this policy has improved the whole financial tone of Alberta and he looks for a splendid season.

Though the Sawn Lumber market has had an off year this has not affected the Standing Timber situation. True few sales have been reported, as each owner will hold rather than sacrifice below its true value. All sales reported have been at a price equal to what has been realized in the best market years. As I have not been to the coast for the last 12 months I am not in touch with the recent sales and cannot quote them to any extent. The transaction of a timber sale seldom reaches the press.

Ontario sales of Standing Timber is still on the up-jump. Last government sale was \$14.40 per M. standing; the sale prior to that \$8.80 in 1910. This means scarcity and naturally has its effect on British Columbia conditions.

The Logging situation in British Columbia could be improved. It is somewhat lower than 1912. I refer to a Timber Limit owner operating same and selling the logs to the mill men. Others sell their standing timber to jobbers, who in turn make into logs and sell to the mill men.

As the McLaren Co. is known to you I will quote their case. This past season they have bought their cut of logs from the Booth Lumber Co. (an American firm), paying as follows: \$6.75 for No. 3, tops and culls: \$8.75 for No. 2; \$12.25 for No. 1.

The Booth Co. in turn paid \$3.00 per M. to the owners of the limits. If the cut of logs run well to No. 1 the price is favourable, but I believe Booth & Co. netted approx. \$9.75 at the mills.

FURTHER.—The influx of American lumber is gradually on the wane. Prior to the summer of 1913 they shipped their lumber over the line and in a fraudulent manner evaded the customs duty. Now ALL is taxed \$2.00 per M.

There is a reason for the American operator underselling the Canadian. Their land is mostly Crown granted and this land when cleared is worth from \$150.00 up. They can afford to sell at a low competitive price with their land sales giving such returns.

Very little land is Crown granted in British Columbia and none elsewhere in Canada. The British Columbia land, with very few exceptions, is inferior to that of Washington and Oregon. Their standing timber is rapidly decreasing and to-day quoted above \$4.00. Those who now sacrifice must face the \$2.00 tax and no evading it.

This same condition applies to Ontario and Quebec, as at present our eastern market is flooded with Georgia Long Leaf Pine. It is the cleared land that will bring them the vaster return. It is only the cheaper grades of lumber that is affected.



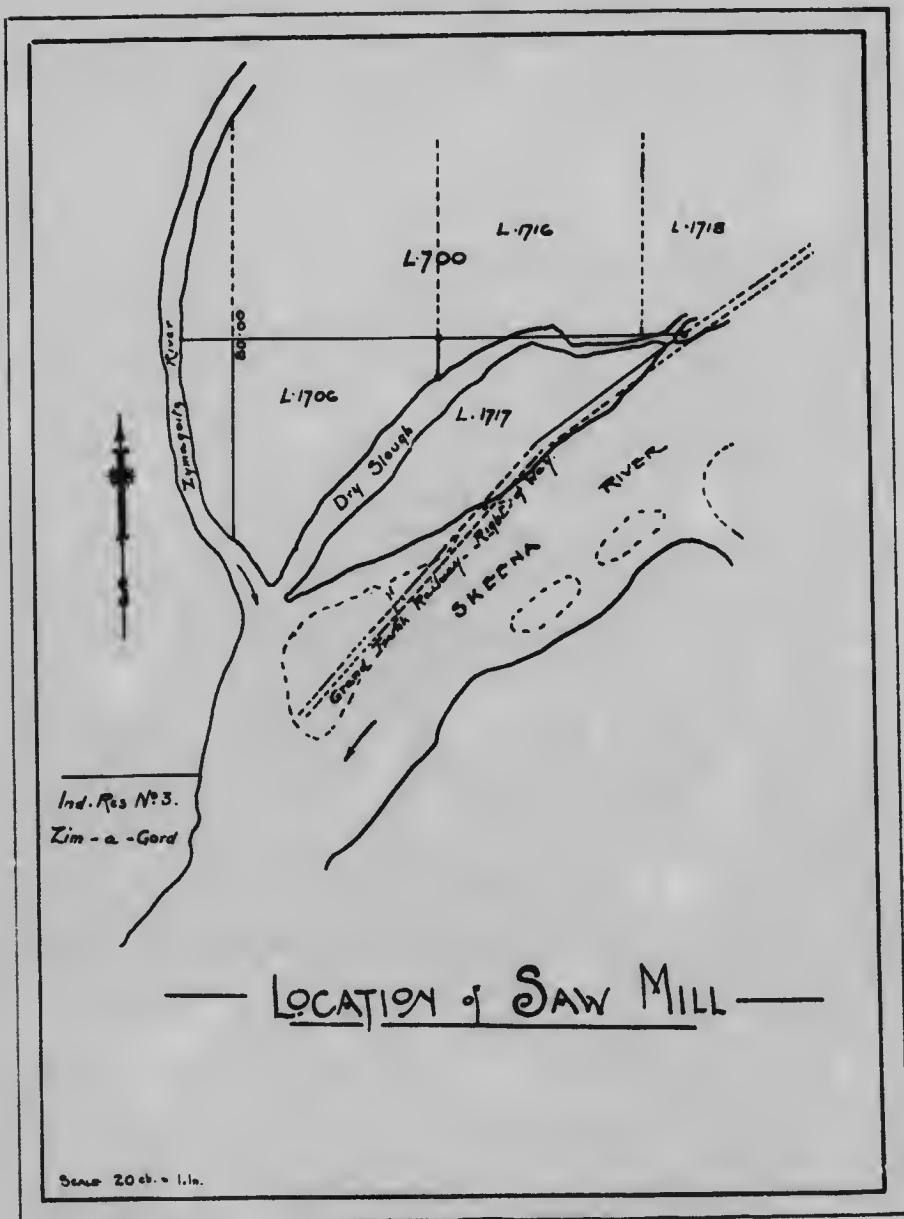
COAST TIMBER
Felled and Bucked Ready for Donkey Engine.

INFORMATION IN RELATION TO THE COMPLETION OF THE GRAND TRUNK PACIFIC.

Letter from Mr. Collingwood Schreiber, Chief Engineer of the Western Division, Grand Trunk Pacific.

"Present indications are that the track will be connected up between Winnipeg and Prince Rupert about the end of May next, and that the road will be in a condition to receive consignments of freight by the following August."

A wire from Fort George, British Columbia, dated January 20th, 1914, says there is yet a gap of 142 miles.



MAP SHOWING PROPOSED LOCATION OF SAW MILL.

JOINT REPORT BY MR. JAMES COXFORD AND MR. A. LUDGATE UPON CONDITIONS AT THE PROPERTY.

Mr. Coxford's former lumber experiences were as follows:—J. W. Munro, 10 years; Munro & Coxford, 2 years; Massey Lumber Company, 3 years.

Mr. Coxford inspected the property with a view to commencing operations upon the completion of the railway; his visits were as follows:—September, 1911, to November, 1911; May, 1912, to August, 1912.

He is considered one of the most experienced and expert lumbermen in Eastern Ontario, and was employed to fix the location of the mill, superintend its construction, and generally to supervise the operations of the Company.

Mr. Ludgate's former lumber experiences were as follows:—Pembroke Lumber Company, 3 years; Hale & Booth, 2 years; J. R. Booth, 5 years; E. C. Whitney, 10 years; Massey Lumber Company, 2 years.

Mr. Ludgate went upon the property on the 1st of September, 1911, and has been there continuously until December, 1913.

His duties were to study the general conditions, the rise and fall of the water, the ice, depths of snow, to travel over the limits and study the timber, and to act as watchman upon the settlers to see that no timber was cut, and in the summer time to look out for fires, and to see that the Government had sufficient men for proper fire protection, also cutting of trails. He lived in a shack which was already there, and boarded himself.

FIRST IMPRESSIONS.

We were told to expect to find a change in the character of the woods in British Columbia as compared with Ontario and Quebec, but we did not think the change would be so vast. We had not stretched our imagination sufficiently. We had not conceived of trees growing to such a height with so little taper and so free from branches or limbs. The height astonished us, and for the first week or so we continually paced fallen trees to accustom ourselves to the length.

It is a very high average to find trees in our Ontario woods to cut out four log lengths, but there we find seven lengths to be conservative.

We find our old eastern bush associates doubt our description of those limits, and they, like ourselves, will have to see to believe.

STAND OF TIMBER.—The stumpage per acre is so heavy and superior that it is impossible to compare it with any timber limits in the East.

The out-boundaries of the limits vary from one to three miles from the main river and there are plenty of creeks.

On the flat river bottoms the growth is lighter and composed principally of hemlock, but as you near the low foot hills the quality and quantity rapidly improves and increases. The nearer the steep mountain sides the better the quality and quantity also. We also find the Northern half of the limits the better half both in quality and quantity. The length of the trees are a wonderful feature.

We would say that on an average it is ninety feet to the first branches. The taper is so slight that it will hardly be noticed in a 16 ft. log. The country is exceptionally free from punk, particularly after leaving the river flats;

there some is to be found, particularly in the hemlock. The diameter is such that we would say 200 feet would be a conservative average for 16 foot logs in the northern half and 150 feet in the southern half, and 80 feet is a fair Ontario average. To-day in quality it excels; it will cut out very clear lumber, all indications show such. The trees look healthy and with a clear fine bark.

GROUND CONDITIONS.—This is one of the chief features in any bush operations. The valley is particularly fortunate in this respect. The surface is smooth and even. The ground rises gradually from the river to the mountain sides and even these mountain sides are accessible and free of difficulties. The present limit lines run to the foot of those mountains and in future years when the outlying timber is obtained it can be logged cheaply. This country differs greatly from the last Ontario operations we were connected with. On the north shore of Georgian Bay (Ontario) the ground surface is so covered with large boulders that trees in falling are frequently broken into parts, Particularly does this apply to the large trees. This causes a heavy loss, and the best results cannot be obtained. The whole valley is entirely free from this fault. Splendid log roads are cheaply constructed and in no instance will there be uphill hauling as there is in Ontario, and there is no undergrowth to interfere.

MILL SITE AND POND.—The mouth of the Zymaquoit is the geographical and logical mill site. A study of the map will show many years' cutting on this river before touching the Kitsumkallum. At very little expenditure a rolling dam can be constructed a hundred or more feet north of the G.T.P. Ry. bridge, that will fill and hold filled the large sloughs shown on the surveyor's plan as reservoirs. The islands at the mouth afford an ideal position for a mill. Very little clearing is necessary and the ground surface is smooth and will not require expensive filling for piling ground.

CANNOT PUT SAWDUST IN THE RIVER.—As the law forbids sawdust to be thrown into the river, an open refuse burner is necessary, the situation for which is good; it would be placed on the bank of the Skeena and the east and west winds will afford sufficient protection to the yards. The G.T.P. Ry. have already constructed a siding on the proposed mill site.

RIVER IMPROVEMENTS.—Very little of this is necessary on the Zymaquoit. A few side dams to keep logs from running 'nto bays, or where river is too wide or too flat, and one reserve dam, is all that will be necessary. In logging operations it would be advisable to leave the logs in roll-ways on the banks of the river and hold them after sufficient logs are in the mill pond. Then the roll-ways can be broken and logs driven as required. This will allow of the proper sorting of logs at the mills. We estimate there is a sufficient flow of water to enable river driving from spring to fall. The reserve dam, 5 miles away, will take care of this.

We are told that very few coast rivers are drivable, but this is certainly an exception.

The Kitsumkallum is also a splendid river to drive. The large lakes at the head of it assure a good pitch of water at any time during the summer season. A reserve dam at the mouth of Mud Lake is really all the river improvements necessary.

A difficulty might arise in the holding of the logs at the mouth of this river. There are several large sloughs at the mouth which a rolling dam would fill.

The early summer freshet is a heavy one, and on this account it would be necessary to hold the cut of logs in the northern lakes and drop them down when the flood has passed. In the next paragraph will be found a



WESTERN RED CEDAR.

scheme that would abandon the Kitsumkallum stream entirely from the foot of Mud Lake to the mouth; we consider it a very feasible scheme for cheap development.

RAILWAY POSSIBILITIES.—We have given this matter a careful study: for the first eight or ten years there is a sufficient cut on the Zymaquoit to take care of a reasonable large mill; after that period we would advise a log railway from the mill site to the foot of Mud Lake. As you know, this would be a cheap operation, the rails being the chief expenditure. All the country on the border of the Lakes could be logged and boomed to the foot of this lake and railed to the mill. Further from the mill to the Lake the railway would traverse the Company's Limits and that territory logged according to construction, a mile or two of railway built each season on each side of the railway.

After Mud Lake is reached we would even suggest that the mill be moved there. It is a perfect mill site and right in the heart of the Valley. There is no doubt about it. The conditions are excellent for booming, piling and holding logs.

When the time comes this suggestion is worthy of consideration. In the construction of the railway there is one divide (high ground) to overcome, but from observation we do not look upon it as a great difficulty. We would estimate the length of the railway to be ten to twelve miles.

CUTTING AND DRIVING TO THE MILL.

LOGGING.—This is an expensive feature of British Columbia lumbering operations and in many or most cases run as high as \$8.00 to \$10.00 per thousand feet.

We consider this country can be logged for \$4.50 to \$5.00 per M. feet, and we further believe it possible to job the logging for this figure.

Operations will be so convenient to the railway that the cost of transporting supplies either in summer or winter is cheaply done. This of course reduces the cost of logging. In our last Ontario operation it cost the Company we were with fully \$40.00 per ton in summer and \$15.00 in winter to deliver supplies to the camp.

We consider \$3.00 per ton will cover delivery on the Zymaquoit.

The system of logging with donkey engines as carried on in British Columbia eliminates horses and this in turn hay and oats that are bulky to transport and expensive. Also fewer men are necessary with this mode and the trees in this valley are of a convenient size to make operations cheap.

TRAILS AND ROADS.—As we have previously pointed out to you, this country is now fairly well supplied with roads and trails and more are being pushed forward. What are now pack trails can be easily made into waggon roads when necessary.

The Government proposes to put a road from mouth of Zymaquoit somewhere to Mud Lake.

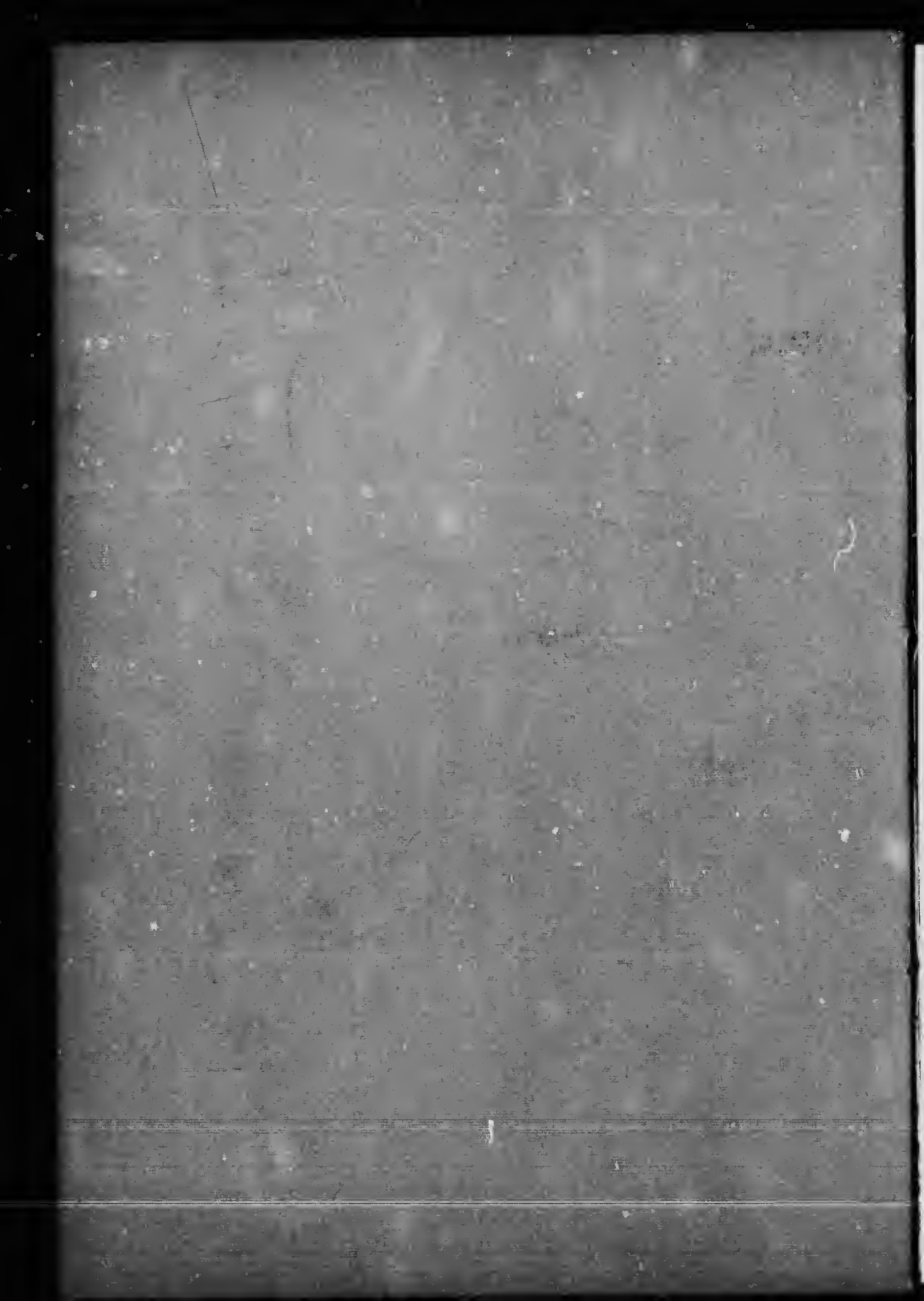
CLIMATE.—An ordinary Ontario season is very similar to the average season in the Kitsumkalum Valley. It lacks the severe continuous zero weather of the upper Ottawa, and only for short periods is real cold weather experienced. Snow usually comes in December and by the 10th of January log roads would be in good condition for haulage by donkey engine or sleighs. This lasts longer than in Ontario and hauling can usually be carried on till April 1st or thereabouts. The snowfall on an average of several winters would be about 3 feet, but in places it lies as deep as 4 feet. Summer and Fall are the two principal seasons to be considered in bush operations in

British Columbia. Those seasons are comparatively dry and the rainfall would not interfere with bush work. The summer rainfalls of Prince Rupert are all that is said of them and are notoriously bad. The intervening mountain ranges changes the climate entirely. In winter Prince Rupert still has its rainfalls whereas the Kitsumkallum has its snow. The length of a summer day in this northern country is of extended length. During these months we could read in the open till after ten o'clock at night. The nights are not over six hours long. Summer flies are a pest there as elsewhere.

It is a fact that the Prince Rupert coast district is so wet that it is impossible to burn the cordwood. It has been necessary to go east for this supply, and Kitsumkallum has supplied this want to the extent of train loads yearly. The slab refuse from a mill would find a ready market and be a good source of revenue.

JAMES COXFORD.

A. LUDGATE.



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MAP OF KITSUMKALLUM VALLEY, SHOWING LOCATIONS OF THE SKEENA RIVER AND ITS TRIBUTARIES.

